CLAIMS

1. Compound capable of modulating, at least partially, the interaction of the hnRNPL and/or FEBP1 proteins, or a homolog of these proteins, with the PTB1 domain of FE65.

2. Compound according to claim 1, characterized in that it slows, inhibits or stimulates, at least partially, said interaction.

3. Compound according to either of claims 1 and 2, characterized in that it is capable of binding the domain of interaction between the hnRNPL and/or FEBP1 proteins, or a homolog of these proteins, and the PTB1 domain of FE65.

4. Compound according to one of claims 1 to 3, characterized in that it is a compound of peptide, nucleic acid, lipid or saccharide type, or an antibody.

5. Compound according to claim 4, characterized in that it is a peptide compound comprising a portion of the peptide sequence of the hnRNPL protein and/or of the FEBP1 protein and/or of derivatives thereof.

6. Compound according to claim 5, characterized in that it comprises a portion of the sequence SEQ ID No. 7 or SEQ ID No. 9.

7. Compound according to claim 4, characterized in that it is a peptide compound

comprising a region whose sequence corresponds to all or a functional portion of the site of interaction of the hnRNPL protein and/or the FEBP1 protein with the PTB1 domain of FE65.

8. Compound according to claim 4, characterized in that it is a peptide compound which is derived from the hnRNPL protein or from the FEBP1 protein (and/or from the homologous forms) and which bears an effector region which has been made nonfunctional.

9. Polypeptide comprising the sequence SEQ ID No. :9 or a derivative or fragment of this sequence.

10. Polypeptide comprising the sequence SEQ ID No. :7 or a derivative or fragment of this sequence.

11. Nucleic acid encoding a peptide compound according to one of claims 4 to 10.

12. Nucleic acid according to claim 11, characterized in that it comprises all or part of the sequences SEQ ID No. :6 or 8, or of a sequence which is derived from these sequences.

13. Nucleic acid encoding a polypeptide according to claim 9.

14. Nucleic acid capable of hybridizing with a nucleic acid according to one of claims 11 to 13, or with its complementary strand.

15. Vector comprising a nucleic acid according to one of claims 11 to 14.

16. Defective recombinant virus comprising a nucleic acid according to one of claims 11 to 14.

17. Antibody or antibody fragment or derivative, characterized in that it is directed against a peptide compound according to one of claims 4 to 10.

18. Nonpeptide compound or a compound which is not exclusively of peptide nature, which is capable of modulating, at least partially, the interaction of the hnRNPL and/or FEBP1 proteins, or a homolog of these proteins, with the PTB1 domain of FE65.

19. Compound according to claim 18, characterized in that the active motifs of a peptide according to one of claims 5 to 8 have been duplicated with a structure which is not a peptide or which is not exclusively peptide in nature.

20. Pharmaceutical composition comprising at least one compound according to one of claims 1 to 10, 18 and 19 or an antibody according to claim 17.

21. Pharmaceutical composition comprising at least one nucleic acid according to one of claims 11 to 14 or one vector according to either of claims 15 and 16.

22. Pharmaceutical composition comprising a peptide compound according to one of claims 4 to 10.

23. Composition according to one of claims 20 to 22, intended for modulating, at least partially, the interaction between the FE65 protein and the hnRNPL or FEBP1 protein.

24. Composition according to one of claims 20 to 22, intended for treating neurodegenerative pathologies.

25. Method for screening or characterizing active molecules, comprising a step of selecting molecules which are capable of binding the sequence SEQ ID No. 7 or the sequence SEQ ID No. 9, or a fragment of these sequences.

26. Method for producing a peptide compound according to one of claims 4 to 10, comprising the culture of a cell which contains a nucleic acid according to one of claims 11 to 14 or a vector according to either of claims 15 and 16, under conditions for expression of said nucleic acid, and the recovery of the peptide compound produced.